Remarks

Reconsideration of this Application is respectfully requested.

Claims 1, 2, 5-9 and 12-17 are pending in the application, with claims 1, 8, 9 and 15 being the independent claims. No claims are sought to be cancelled. No new claims are sought to be added. No claims are sought to be amended.

The Examiner is asked to enter and consider this reply after final because it raises no new issues requiring further search and/or consideration and places the application in condition for allowance and/or better condition for appeal.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Statement of Substance of Interview

The Examiner, Tuan Nguyen, is thanked for his time during an in-person interview with Applicants' representative, Ross G. Hicks, on October 27, 2010. The reference *Hareyama* (U.S. Patent No. 6,700,440), and in particular Figure 4, were discussed with respect to the recited claim features. However, no agreement was reached.

Rejections under 35 U.S.C. § 103

Claims 1-2, 8-9, 15 and 17

Claims 1-2 and 8-9 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Appln. Publn. No. 2002/0136325 to Pehlke *et al.* (herein

"Pehlke"), in view of U.S. Patent No. 6,700,440 to Hareyama (herein "Hareyama"), and further in view of U.S. Patent No. 6,968,201 to Gandhi et al. (herein "Gandhi"). Office Action, pp. 5-9. Further, claims 15 and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Pehlke in view of Hareyama. Office Action, pp. 13-14. Applicants traverse this rejection and the Response to Arguments section on pages 2-5 of the Office Action.

Independent claim 1 recites among other things:

"powering on or off at least one branch of the power amplifier according to the received instruction to enable a logarithmic change in the output power of the power amplifier"

Independent claims 8, 9 and 15 recite a similar feature, using analogous language. The Office concedes that *Pehlke* fails to disclose the above distinguishing feature. *Office Action, p. 5.* However, the Office asserts that *Pehlke-Hareyama* and *Pehlke-Hareyama* Gandhi are proper combinations, and that *Hareyama* overcomes the deficiencies of *Pehlke. Office Action, pp. 5-6.* Applicants disagree.

Hareyama discloses a power amplifier with a high power region and a low power region. See Hareyama, FIG. 4, Curves H and L. In its high power mode of operation (curve H), both power amplifiers I1 and I2 are operational, SW20 is switched off and SW21 is switched on. Hareyama, Col. 5, Lns. 41-42 and 53-54. Switches SW11 and SW12 are switched off in the matching circuit 2 to meet the matching conditions when both I1 and I2 are in operation. Hareyama, Col. 5, Lns. 50-63.

Conversely, in its low power mode of operation (curve L), only power amplifier I1 is operational while I2 is turned off, SW20 is switched on and SW21 is switched off. Hareyama, Col. 6, Lns. 28-37. Switches SW11 and SW12 are switched on in the matching circuit 2 to meet the matching conditions when in low power operation. Hareyama, Col. 6, Lns. 37-44.

However, nowhere does *Hareyama* disclose "powering on or off at least one branch of the power amplifier ... to enable a logarithmic change in the output power of the power amplifier," as recited in independent claims 1, 8, 9 and 15. *Hareyama* focuses on providing two output regions, H and L, with **continuously** variable power adjustment within those regions. Further, FIG. 4 of *Hareyama* indicates that the transition between the high power (H) and the low power (L) regions is represented by a **zero power change or by a horizontal line** (e.g., line from A to A1 in FIG. 4). Therefore, nowhere is there any description in *Hareyama* of "powering on or off at least one branch of the power amplifier ... [that] enable[s] a logarithmic change in the output power of the power amplifier."

Therefore, *Hareyama* does not overcome the deficiencies of *Pehlke* in the *Pehlke-Hareyama* and *Pehlke-Hareyama-Gandhi* combinations. In addition, *Gandhi* does not recite, nor does the Office assert that *Gandhi* recites the feature of "powering on or off at least one branch of the power amplifier ... to enable a logarithmic change in the output power of the power amplifier." Accordingly, absent a disclosure of the above recited distinguishing feature, Applicants respectfully request reconsideration and withdrawal of the rejection of independent claims 1, 8, 9 and 15.

Claims 2 and 17 depend from independent claims 1 and 15, and are patentable for at least the same reasons as the independent claim from which they depend and further in view of their respective features. Reconsideration and withdrawal of the rejections of claims 2 and 17 are respectfully requested.

Claims 5-7, 12-14, and 16

Claims 5, 12 and 16

Claims 5, 12, and 16 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Pehlke* in view of *Hareyama* and *Gandhi*, and further in view of U.S. Patent Publication No. 2004/0219898 to Bult *et al* (herein "*Bult*"). Applicants traverse this rejection and respectfully request this rejection be withdrawn and these claims be passed to allowance.

Reference "Bult"

Applicants submit that *Bult* is unavailable as a § 103(a) reference, pursuant to 35 U.S.C. § 103(c). *Bult* was filed on December 30, 2003, and was published as a pending application on November 4, 2004. The present application was filed on January 22, 2004.

Applying the provisions of 35 U.S.C. § 103(c)(1), subject matter developed by another person which qualifies as art only under 35 U.S.C. § 102(e) shall not preclude patentability where the subject matter of *Bult* and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.

The present application is assigned to Broadcom (recordation date: January 22, 2004, reel 014922, frame 0723). *Bult* is also assigned to Broadcom (recordation date: December 30, 2003, reel 014859, frame 0247). Accordingly, Applicants submit that the claimed invention was "owned by the same person or subject to an obligation of assignment to the same person." As such, Applicants submit that the provisions of 35 U.S.C. § 103(c) have been satisfied and that *Bult* is unavailable as a reference against the present application.

Absent the *Bult* reference, the deficiencies of the *Pehlke*, *Hareyama* and *Gandhi* references are not remedied for claims 5, 12 and 16. Moreover, as noted above, neither *Hareyama* nor *Gandhi* overcome the deficiencies of *Pehlke* in the *Pehlke-Hareyama* and *Pehlke-Hareyama-Gandhi* combinations with respect to the recited feature of "a logarithmic change in the output power of the power amplifier." Accordingly, absent the *Bult* reference and absent the disclosure of the above recited distinguishing feature, claims 5, 12 and 16 are therefore not rendered obvious. Therefore, Applicants respectfully request that the rejection to claims 5, 12 and 16 be withdrawn.

Claims 6, 7, 13 and 14

Claims 6, 7, 13 and 14 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Pehlke* in view of *Hareyama* and *Gandhi* and further in view of U.S. Patent No. 6,255,906 to Eidson *et al* (herein "*Eidson*"). Applicants traverse this rejection and respectfully request this rejection be withdrawn and these claims be passed to allowance.

The rejection to claims 1 and 9, from which claims 6, 7, 13 and 14 depend, was traversed above based on the lack of disclosure, teaching or suggestion of *Pehlke*, *Hareyama*, and *Gandhi* regarding features recited in claims 1 and 9. Even assuming arguendo that *Pehlke*, *Hareyama*, *Gandhi*, and *Eidson* may be combined in the manner asserted by the Examiner (which Applicants do not concede), *Eidson* does not remedy the above deficiency of the *Pehlke-Hareyama-Gandhi* combination. *Eidson* neither discloses, nor does the Office assert that *Eidson* discloses the recited feature of "a logarithmic change in the output power of the power amplifier." Absent this teaching in *Pehlke*, *Hareyama*, *Gandhi* or *Eidson*, and therefore in the asserted *Pehlke-Hareyama-Gandhi-Eidson* combination, claims 1 and 9, and therefore claims 6, 7 13 and 14, which depend upon claims 1 and 9, are therefore not rendered obvious. Applicants respectfully request that the rejection to claims 6, 7, 13 and 14 be withdrawn.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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